

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

1. (currently amended) A liquid fuel supply type fuel cell, comprising:

a solid electrolyte film,

an anode electrode disposed on one surface of the solid electrolyte film,

a cathode electrode disposed on the other surface of the solid electrolyte film, and

a passage for feeding air to the cathode electrode,

wherein [[an]] a separation membrane including a material having an oxygen/nitrogen separation coefficient more than one is disposed between the cathode electrode and the passage, and

wherein the separation membrane covers an entire surface of the cathode electrode.

2. (canceled)

3. (previously presented) The liquid fuel supply type fuel cell in accordance with claim 1, wherein the separation

membrane is a polysiloxane-based polymer film or a polyimide-based polymer film.

4. (previously presented) The liquid fuel supply type fuel cell in accordance with claim 1, wherein the separation membrane is a polyorganosiloxane-based polymer film.

5. (previously presented) The liquid fuel supply type fuel cell in accordance with claim 1, wherein the separation membrane includes a material having an oxygen/nitrogen separation coefficient equal to or more than two.

6. (previously presented) The liquid fuel supply type fuel cell in accordance with claim 1, wherein the separation membrane includes a material having a water vapor transmission coefficient equal to or more than 0.6×10^{-6} $\text{cm}^3(\text{STP})/\text{cm}^2 \cdot \text{sec} \cdot \text{cmHg}$.

7. (previously presented) The liquid fuel supply type fuel cell in accordance with claim 1, wherein the liquid fuel supplied to the anode electrode is methanol.

8. (new) A liquid fuel supply fuel cell, comprising:
a layer of solid electrolyte film;
an anode electrode formed as a layer on one surface of the solid electrolyte film;

a cathode electrode formed as a layer on an opposing surface of the solid electrolyte film;

a separation membrane including a material having an oxygen/nitrogen separation coefficient more than one formed as a layer on said cathode electrode;

a separator spaced apart by a space from said separation membrane; and

a passage for feeding air to the cathode electrode formed in said space between said separation membrane and said separator.

9. (new) The liquid fuel supply fuel cell in accordance with claim 8, wherein the separation membrane is a polysiloxane-based polymer film or a polyimide-based polymer film.

10. (new) The liquid fuel supply fuel cell in accordance with claim 8, wherein the separation membrane is a polyorganosiloxane-based polymer film.

11. (new) The liquid fuel supply type fuel cell in accordance with claim 8, wherein the separation membrane includes a material having an oxygen/nitrogen separation coefficient equal to or more than two.

12. (new) The liquid fuel supply type fuel cell in accordance with claim 8, wherein the separation membrane includes a material having a water vapor transmission coefficient equal to or more than $0.6 \times 10^{-6} \text{ cm}^3(\text{STP})/\text{cm}^2 \cdot \text{sec} \cdot \text{cmHg}$.

13. (new) The liquid fuel supply type fuel cell in accordance with claim 8, wherein the liquid fuel supplied to the anode electrode is methanol.

14. (new) A liquid fuel supply fuel cell, comprising:
a solid electrolyte film;
an anode electrode disposed on one surface of the solid electrolyte film;
a cathode electrode disposed on an opposing surface of the solid electrolyte film;
a separation membrane including a material having an oxygen/nitrogen separation coefficient more than one is overlying and in direct contact with the cathode electrode; and
a passage overlying the separation membrane for feeding air to the cathode electrode, so that said separation membrane is between said cathode electrode and said passage.